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(US). **ZHANG, James, Zhiming** [US/US]; 10854 Belair  
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PCT/US2003/036575(74) Agents: **TRIPOLI, Joseph, S.** et al.; Thomson Licensing  
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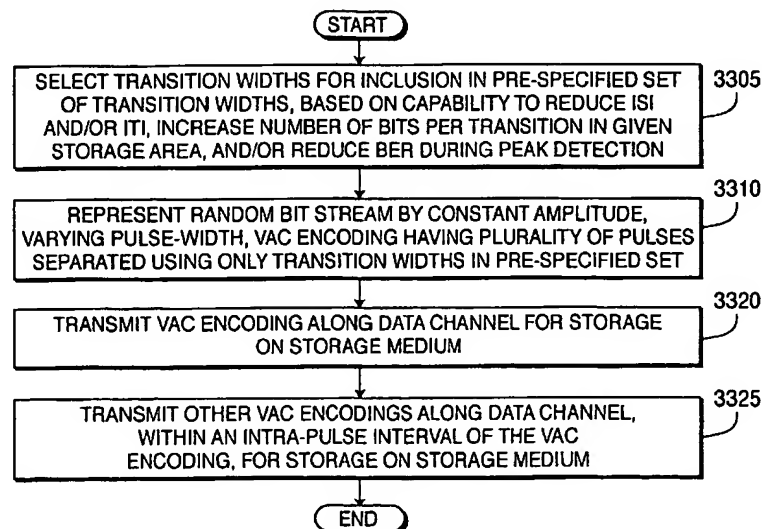
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SON LICENSING S.A.** [FR/FR]; 46, Quai A. Le Gallo,  
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(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **MOHAN, Chandra**

[Continued on next page]

(54) Title: MULTI-DIMENSIONAL CODING FOR HIGH-DENSITY STORAGE MEDIA APPLICATIONS



(57) Abstract: There is provided a method for encoding a random bit stream in two-dimensions for storage on a storage medium. The random bit stream is encoded (3310) using Variable Aperture Coding (VAC) so as to generate a constant amplitude, varying pulse-width, VAC encoding that represents the random bit stream by a plurality of pulses separated using only transition widths included in a pre-specified set of transition widths.



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## INTERNATIONAL SEARCH REPORT

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PCT/US03/36575

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : G11B 5/02, 20/14; H03K 7/04, 7/06, 7/08; H04B 14/04

US CL : 360/27, 40, 49, 51; 375/238, 239, 242

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99 46861 A1 (MOHAN et al.) 16 September 1999 (1999.09.16) Abstract, Figures 5, 6 and 7 Page 5, Line 1-Page 6, Line 26; Page 8, Lines 11-28 Page 10, Line 1-page 11, Line 18, Page 12, Line20-Page 13, Line 8	1-5, 7, 9-13, 15
X	US 6,359,525 B1 (MOHAN et al) 19 March 2002 (2002.03.19) Abstract, Figures 1 and 2 Column 3, Line 29-Column 4, Line 23	1-5, 7, 9-13, 15
A	US 6,055,119 A (LEE) 25 April 2000 (2000.04.25) Abstract, Figures 2, 4, 5 and 6 Column 4, Line42-Column 5, Line 15 Column 5, Line 56-Column 7, Line19	6, 8, 14, 16

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David R. Hudspeth

Telephone No. (703) 305-4900  
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**C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,490,091 A (KOGAN et al) 06 February 1996 (1996.02.06) Column 2, Lines 33-55; Column 5, Lines 4-45	6, 8, 14, 16